

# The European Working Time Directive, Work-Life Balance, and Patient Safety

***EAPH, Barcelona***

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**NHS** North West

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*December 2010*

- **10 Strategic Health Authorities (SHAs) in England**

**NHS North West**



# Background

- A **'long working hours' culture** is prevalent in the UK (*in 2005 the UK had the longest working week in Europe*)
- Work/Life balance has often been sacrificed in favour of professional values, especially in medicine.

# Background

- The European Working Time Directive (EWTB) first appeared in 1993
- Incorporated into UK law in 1998
- *'... the average working time for each seven-day period, including overtime, does not exceed 48 hours'*

# Background

- Restriction of doctors' working hours was implemented gradually within the UK- **an incremental reduction to 48 hours by August 2009**
- *NHS North West undertook a project to implement the 48 hour limit **one year ahead of schedule** in Aug 2008*

# Background

- **EWTD was/is a source of major controversy in the UK**
- **Opinion (both professional and public) is markedly divided...**

***“Patients will die if the government pursues plans to stop doctors working more than 48 hours a week...”\****

\*Campbell D. Doctors' leader warns 48-hour week will endanger patients' , ***The Guardian, Saturday 11 April 2009***

***“If the 48-hour week is introduced as planned on 1 August, patient safety is going to be reduced. People are going to die because of this...”\****

\*John Black, ***President of the Royal College of Surgeons***, The Guardian, Saturday 11 April 2009



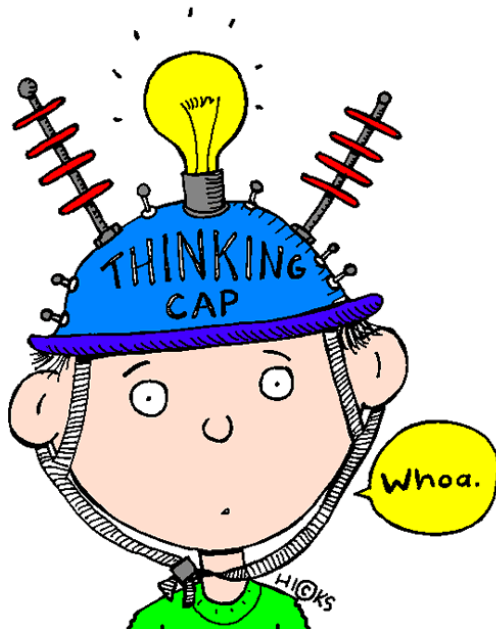
***“...excessive hours of work for doctors in training are damaging to the individual doctors health, their individual safety and to patient safety.”\****

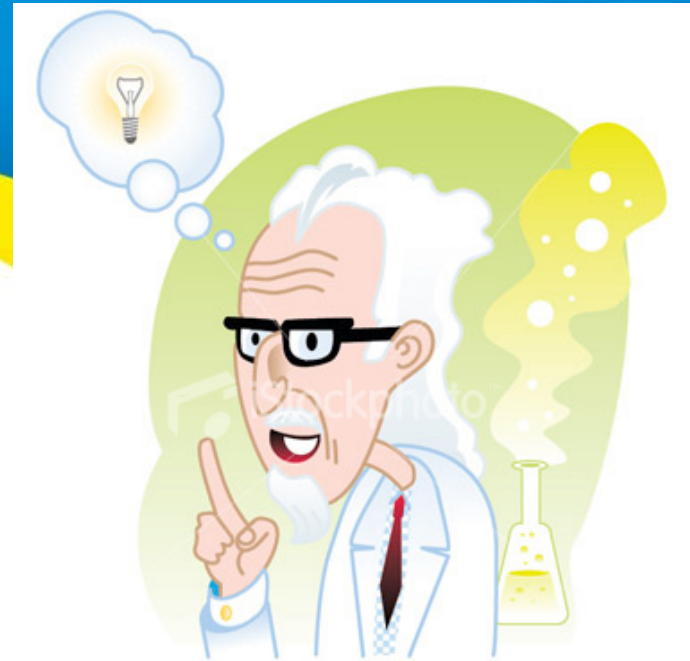
***“Tired doctors are not safe  
doctors...”\****

To address this debate, NHS North West undertook a study to collect **objective** data around patient safety and the EWTD...



In August 2008, **NHS North West** implemented a 48 hr working week. The rest of **England** did not implement this limit until August 2009...





**This allowed a ‘window’ during which parameters of **patient safety** in NHS North West could be compared to the rest of the country**

# METHODS

- **Hospital Standardised Mortality Ratio (HSMR)**
  - **Average Length of Stay (ALOS)**, and
  - **Standardised Readmission Rate (SRR)**
- **3** financial years from 2006/2007 to 2008/2009
- Across all **acute Trusts**, and **all specialties**
- **NHS North West** and **National** data were compared

## Hospital Standardised Mortality Ratio (HSMR)

- The HSMR compares the number of expected deaths with the number of actual deaths in a ratio

$$\frac{\text{observed deaths}}{\text{expected deaths}} \times 100$$

# HSMR

The rates are adjusted to **standardise** for difference in case mix, including:

- Sex
- Age group
- Method of admission
- Socio-economic deprivation (Carstairs Index)
- Primary diagnosis (Clinical Classification System)
- Co-morbidities (Charlson Score)
- Number of previous admissions
- Month of admission
- Whether a patient is being treated within the specialty of palliative care.

*A published methodology for calculation of HSMRs was utilised*



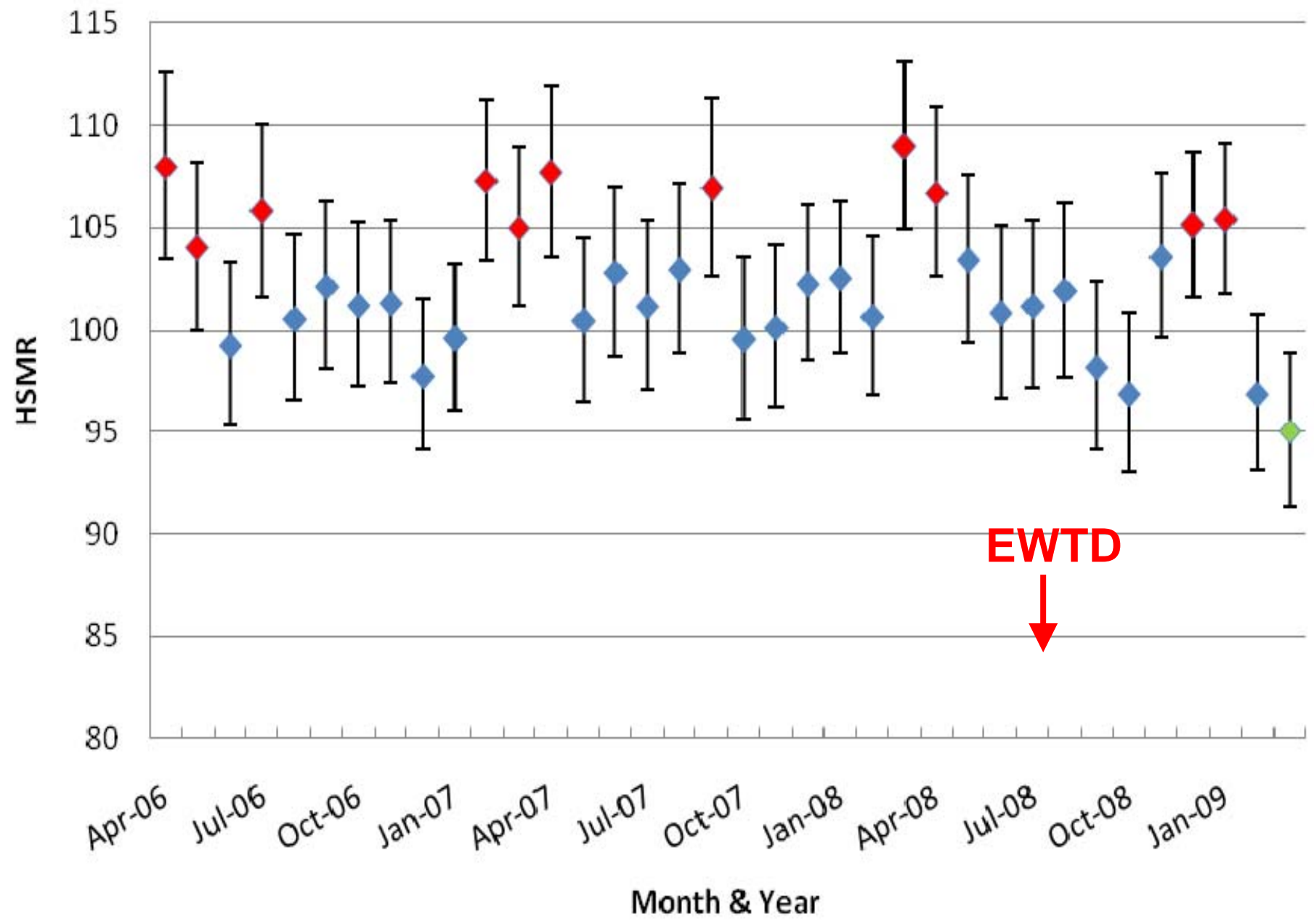
## Average Length of Stay (ALOS)

- Measures the average duration of all patient episodes in hospital from the day of admission to the day of discharge
- Divided into ***elective*** and ***non-elective*** groups

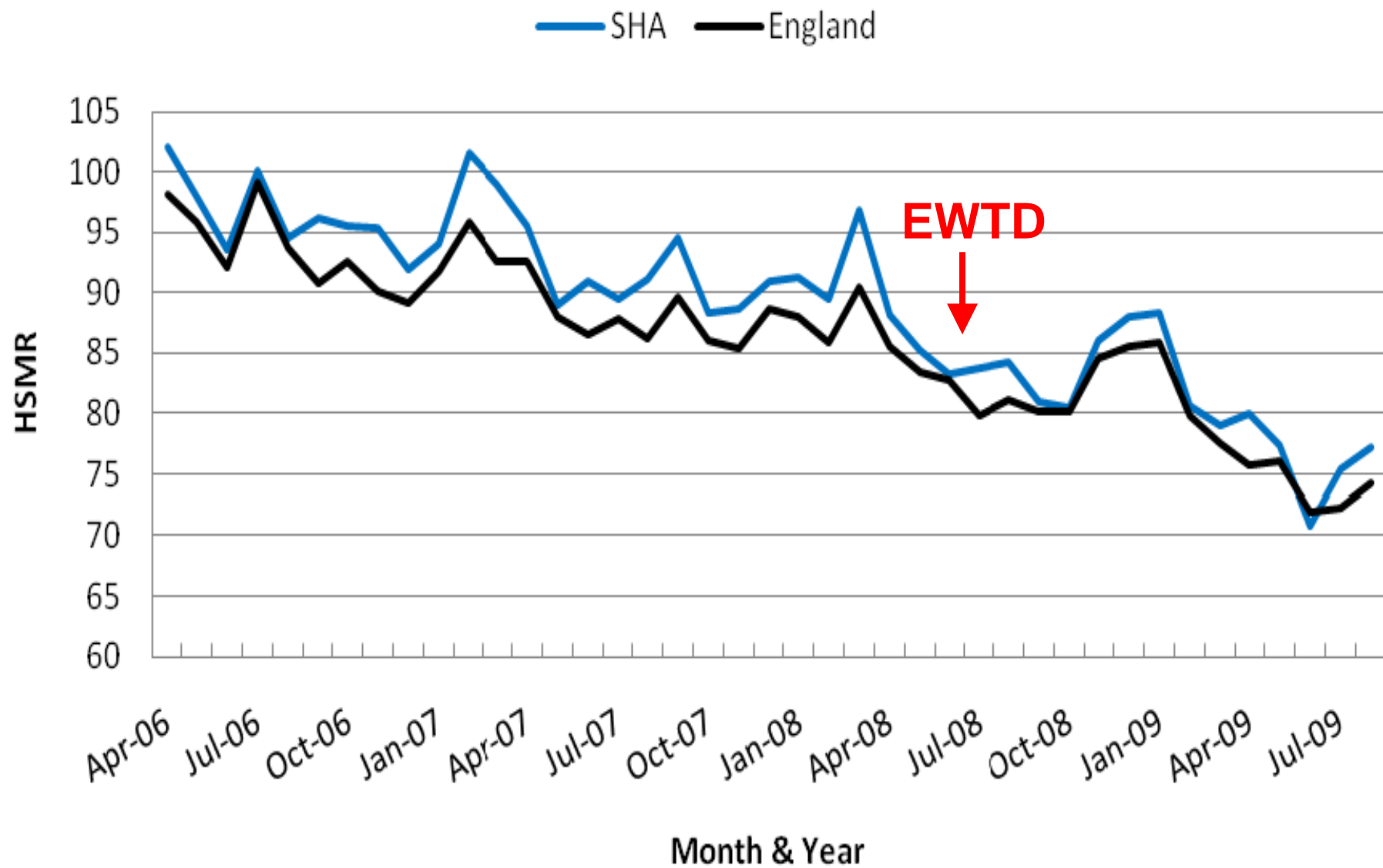
## Standardised Readmission rate (SRR)

- Measures the number of **emergency readmissions**
- ...to acute trusts **within 28 days of discharge**, *where readmission was not part of the planned treatment.*
- **Standardised** to account for difference in case mix in the same way as HSMRs

NHS North West HSMR by Month from April 2006 to March 2009



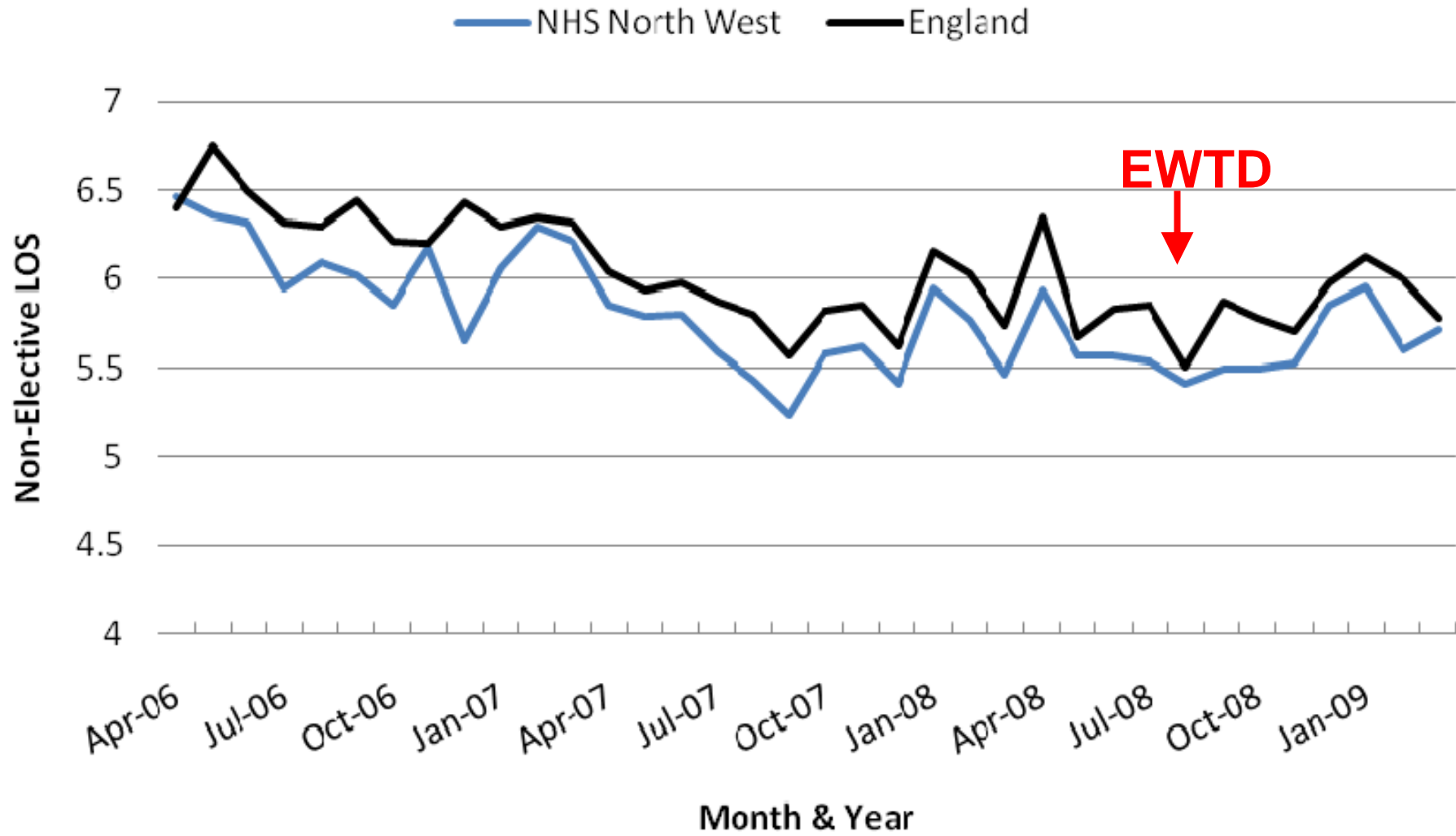
# NHS North West & England HSMRs from April 2006 to August 2009 with 2005 Benchmarks



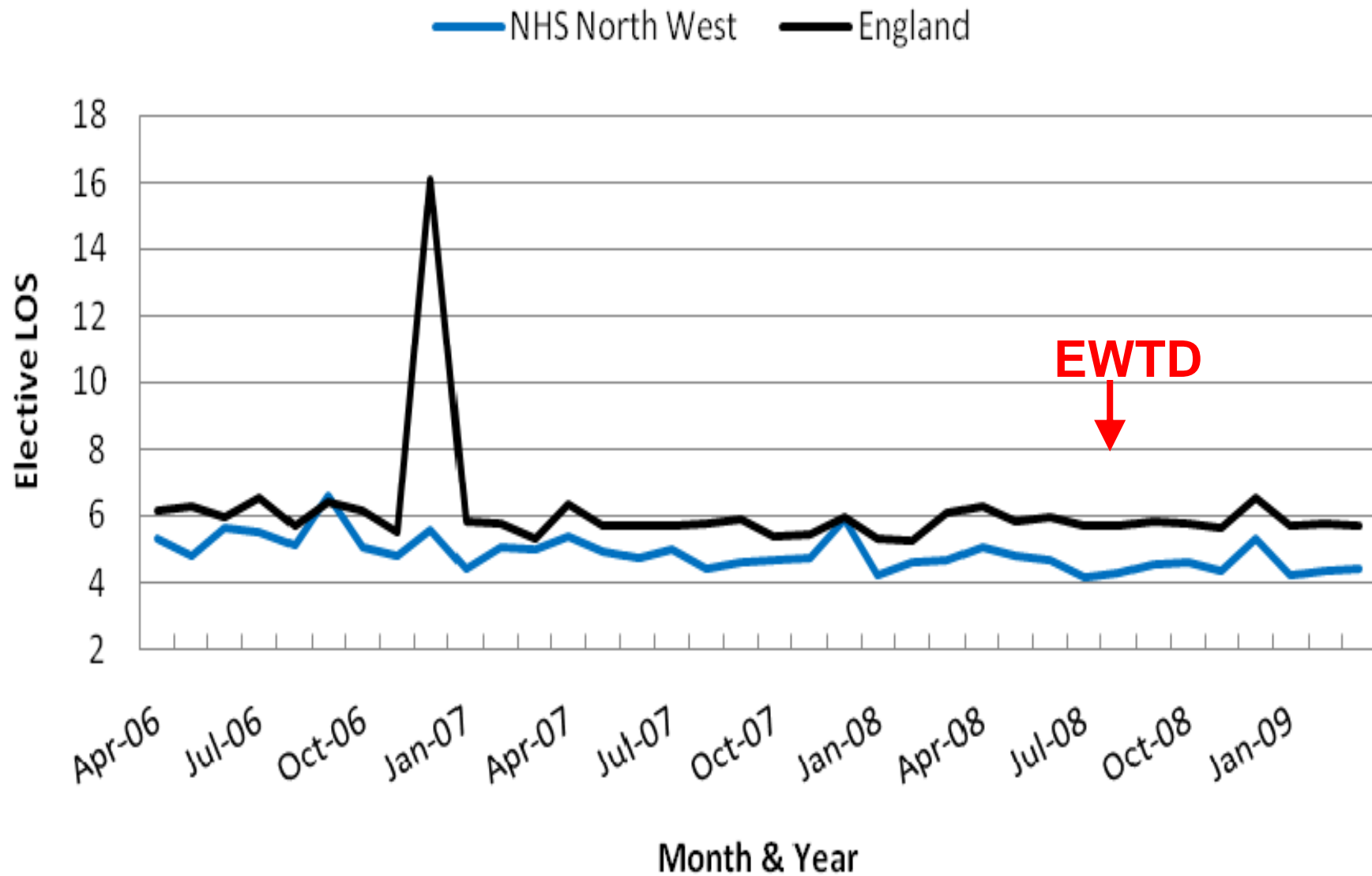
# HSMR: Summary points

- ***No significant variation from the national HSMR trend following EWTD implementation in the North West...***
- ...or during the whole period of EWTD implementation
- Where NHS North West showed a decline in the HSMR trend, this is reflected in the national picture

## Non-Elective Average Length Of Stay Comparison Between NHS North West and England April 2006 to March 2009



## Elective Average Length Of Stay Comparison Between NHS North West and England April 2006 to March 2009

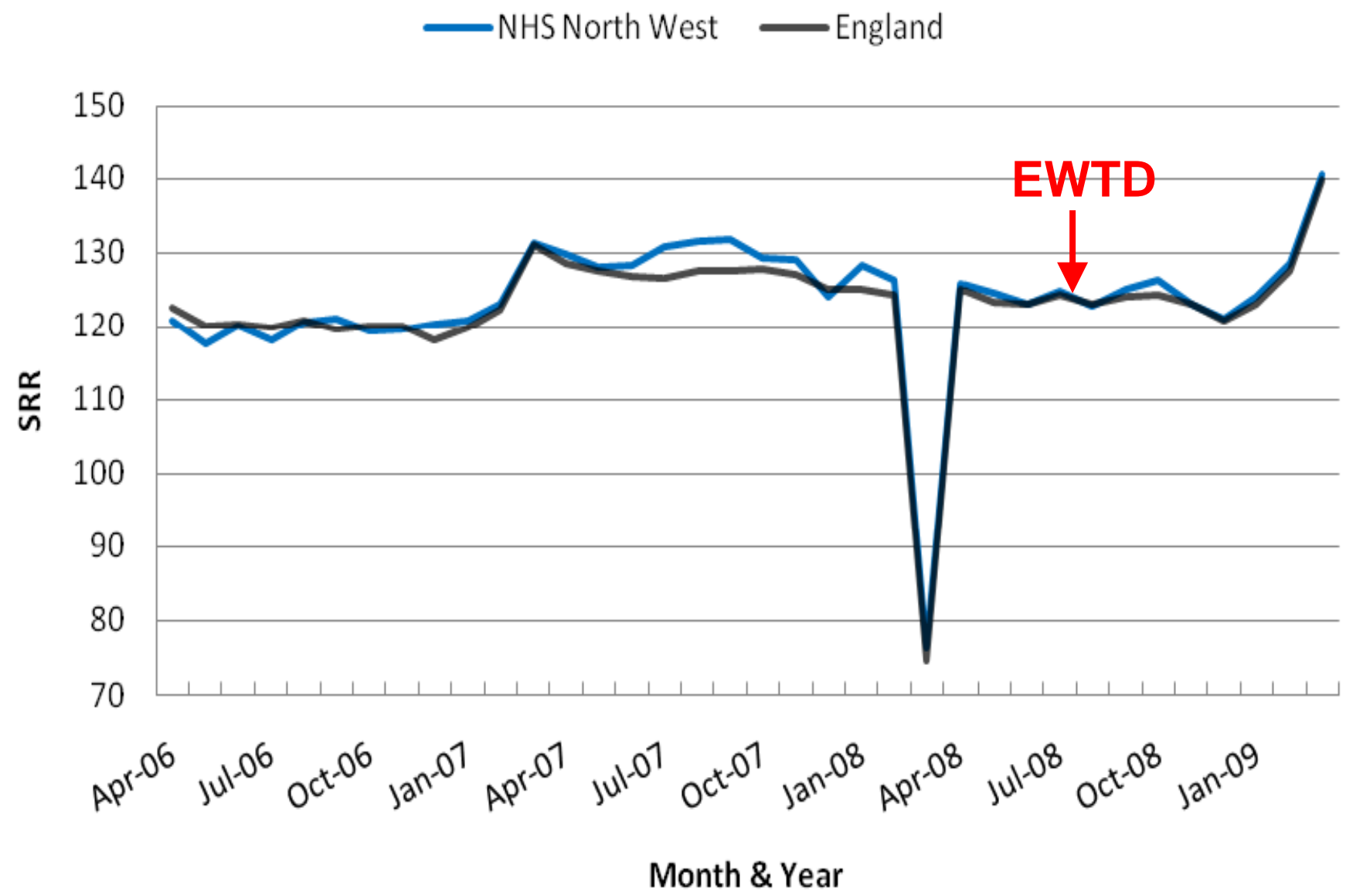


## ALOS: Summary points

- Our data reveal a lower ALOS at NHS Northwest in comparison to England throughout the period studied
- Where there is an increase in national ALOS, this is mirrored at NHS North West
- ***From August 2008 the ALOS for NHS Northwest follows the national trend, although remains lower on average***



# Standardised Readmission Rate at NHS North West & England April 2006 - March 2009



## SRR: Summary points

- The SRR at NHS Northwest from April 2006 to March 2009 is similar to the national average
- ***No appreciable trend change in SRR following introduction of a 48hr week in NHS Northwest, or any significant divergence from the national average***

## **Credibility of HSMRs?**

- ...have been **utilized worldwide** since the 90's to monitor provision of care over time and to identify opportunities for improvement
- ...have become an **internationally recognised objective measure of quality of care**
- *...adopted by Canadian Institute for Health Information as recently as 2005 in order to drive their patient safety agenda*

# The pitfalls of HSMR analysis

**NHS**

North West

- administrative errors
- miscoding
- missing data

...however, missing data or miscoding would be unlikely to lead to the ***clear*** and ***consistent*** results that we have demonstrated

# Was this comparison valid?

Was NHS North West truly 'compliant' with EWTD?

	EWTD compliance		
	Aug '08	Jan '09	Aug '09
NHS NW			
ENGLAND			

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Was NHS North West truly 'compliant' with EWTD?

	EWTD compliance		
	Aug '08	Jan '09	Aug '09
NHS NW	94%*		
ENGLAND			

*\*British Journal of Health Care Management 2009*

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<b>NHS NW</b>	94%		
<b>ENGLAND</b>		72%	<b>91%</b>



## Final points

- There is no evidence that EWTD implementation in the North West region of England has had any detrimental effect on parameters of patient safety
- ...In fact there has been **continued improvement** in these parameters since August 2008
- BUT...be aware of the challenge**, and **seize the opportunity**



**NHS** North West

# Junior Doctor Advisory Team

**Thanks**